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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,229	04/27/2006	John William Chapman	056159-5261	6003
9629	7590	12/09/2009		
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			EXAMINER	
			STEADMAN, DAVID J	
ART UNIT		PAPER NUMBER		
1656				
MAIL DATE		DELIVERY MODE		
12/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/539,229	<b>Applicant(s)</b> CHAPMAN ET AL.
	<b>Examiner</b> David J. Steadman	<b>Art Unit</b> 1656

**—The MAILING DATE of this communication appears on the cover sheet with the correspondence address —**

THE REPLY FILED 06 October 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 3 months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on 06 October 2009. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
- (b)  They raise the issue of new matter (see NOTE below);
- (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1,6,7,9,12 and 14-17

Claim(s) withdrawn from consideration: \_\_\_\_\_

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fail to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

See Continuation Sheet.

12.  Note the attached *Information Disclosure Statement(s)*. (PTO/SB/08) Paper No(s). \_\_\_\_\_

13.  Other: \_\_\_\_\_

/David J. Steadman/  
Primary Examiner, Art Unit 1656

Continuation of 3. NOTE: Applicant's amendment after final rejection, filed on 10/6/09, is acknowledged. However, the amendment has not been entered in view of the amendment to claim 1 and the amendment to add claim 19, which require further consideration and necessitate new rejections under 35 U.S.C. 112, first and second paragraphs. As amended, claim 1 recites, "the type III AFP...has increased ice recrystallization inhibitory activity as compared to glycosylated AFP". However, it is unclear as to whether or not the "glycosylated AFP" is limited to being glycosylated "type III AFP" as recited in line 7 of claim 1 or encompasses any glycosylated AFP, thus necessitating a new rejection under 35 U.S.C. 112, second paragraph. This lack of clarity necessitates a new rejection under 35 U.S.C. 112, first paragraph, because the specification provides only a single species of proteins that have increased ice crystallization inhibitory activity, i.e., SEQ ID NO:1 recombinantly produced in a pmt1 and/or pmt2 deficient *S. cerevisiae*. The specification fails to disclose any variants of SEQ ID NO:1 that have increased ice crystallization inhibitory activity as compared to ANY glycosylated AFP. Also, since all proteins of a sufficient length share a common function of eliciting an antibody, it is unclear from claim 19 as to whether or not the "functional equivalents" of "the type III HPLC-12 AFP" are intended to have "increased ice recrystallization inhibitory activity in comparison to glycosylated AFP". Also, as with claim 1, claim 19 recites "in comparison to glycosylated AFP", thus necessitating new rejections under 35 U.S.C. first and second paragraphs, for issues noted above.

Continuation of 11. does NOT place the application in condition for allowance because: The request for reconsideration in the reply filed on 10/6/09 has been fully considered, however, the amendment does not place the application in condition for allowance. The amendment to the claims filed on 10/6/09 has not been entered because the claims as amended require at least further consideration as noted above. See MPEP § 714.13. Applicant's arguments in the amendment filed on 10/6/09 have been fully considered. However, in view of the non- entry of the amendment, applicant's arguments are not found persuasive to overcome the outstanding rejection(s) as set forth in the Office action mailed on 5/6/09 for the reasons of record stated therein. In the interest of compact prosecution, it is noted that while the amendment filed on 10/6/09 would appear to obviate the objections to claim 9 and the rejection of claim 17 under 35 U.S.C. 112, second paragraph, the amendment would not appear to overcome the rejections under 35 U.S.C. 112, first paragraph, and the rejection under 35 U.S.C. 103(a). Regarding the rejection under 35 U.S.C. 112, first paragraph, the action by which the recited *S. cerevisiae* strain is deficient in pmt1 and/or pmt2 remains unlimited, while the specification and prior art of Ng discloses only a single method of rendering a *S. cerevisiae* deficient in pmt1 and/or pmt2, i.e., deletion of pmt1 and/or pmt2, which fails to describe or enable all strains deficient in pmt1 and/or pmt2 by any action. Regarding the rejection under 35 U.S.C. 103(a), contrary to the position taken in the Declaration under 37 CFR 1.132 and applicant's arguments, one of ordinary skill in the art at the time of the invention, in view of the teachings of Ng, would have been motivated to modify the reference of Chapman to use the expression host of Gentzsch.